LGS
Lodi Gas Storage, L. L. C.
INNOVATORS IN NATURAL GAS

March 4, 2016

Department of Conservation
801 K Street, MS 24-02
Sacramento, CA 95814
ATTN: UIC Discussion Draft
UIC.Regulations@conservation.ca.gov

VIA ELECTRONIC MAIL

RE: Public Comment: Updated Underground Injection Control Regulations Pre-Rulemaking Discussion Draft

Dear Sir or Madam:

Lodi Gas Storage, L.L.C. (LGS) submits these comments to address the *Updated Underground Injection Control Regulations, Pre-Rulemaking Discussion Draft (Discussion Draft)*, which was publically released by the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) for the purpose of receiving public input on the updates to the Division's Underground Injection Control (UIC) Program. Below you will find our comments as they pertain to our *Discussion Draft* document review.

GENERAL COMMENTS

As per our discussion with DOGGR, it is our understanding that:

1. Existing operators do not need to reapply for a new Project Approval Letter.
2. Fluid injection wells do not include gas injection wells.

We request that DOGGR provide clarification on the above general comments in their regulations.

DIRECTED COMMENTS

The Pre-Rulemaking *Discussion Draft* for Gas Storage Operations provided by DOGGR is helpful in guiding the discussion and further understanding what DOGGR is trying to accomplish. The discussion sheet provided by DOGGR places clarification at the forefront of all of its regulatory goals, which allows for professionals and experts in the industry to help provide logistical input that is reasonable for operators, realistic being key. Below are some questions/comments regarding the language of the *Discussion Draft*. **It is within this area that we are requesting some additional clarification from lawmakers as to their legislative intent and terms:**

1520 W. Kettleman Lane, Suite A1 • Lodi, CA 95242
209 368 9277 • 209 368 9276 (Fax) • www.lodistorage.com

Comment 1:

1720.1 Definitions – We request that "Fluid Injection Well" be defined, and as stated in our general comments be clear as to exclude wells used for natural gas injection.

Comment 2:

1720.1 (f) – Underground Source of Drinking Water (USDW) – The USDW characterization of less than 10,000 TDS is reasonable. However, it is unclear that if a producer is pumping into a zone where water quality is improved by their action what will happen should the zone reach less than 10,000 TDS. If this improvement in water quality is due to the action of the injection itself, and causes the improving of a previously non-USDW zone into a now USDW zone, what will happen? Will this change the aquifer designation? What will this mean for the producer who has effectively improved the water supply by performing injections? We request herein that this be better discussed and considered within the general regulations.

Comment 3:

1724.6.(a)-(d) Project Approval Letter (PAL) – "shall specify the location and nature of the underground injection project, as well as the conditions of the Division's approval."

a) If injection is suspended under Section 1724.10(l) what is the timeline for resuming underground function by approval if life, health, property, and natural resources are not at risk? If they are?
b) How is "subsequent approval" defined in 1724.6(b)? Is it verbal? Is it an addendum or modification to the prior PAL or is a new PAL required?
c) For existing and permitted underground injections, clarify that a new Project Approval Letter (Section 1724.6.) is not required from the Division prior to continuing injection.

1520 West Kettleman Lane • Suite A1 • Lodi, California 95242
209 368 9277 • 209 368 9276 (Fax) • www.lodistorage.com

Comment 4:

1724.7 (a)(1) – "An engineering and geological study demonstrating that injected fluid will not migrate out of the approved zone or zones through another well, geologic structure, faults, fractures, or fissures, or holes in casing…"

For operators with existing water disposal project permits, if further information is requested by DOGGR, operators should be able to use:

1. Historic data such as groundwater testing of local wells,
2. Observed continuous pressures in existing oil/gas wells,
3. Review of older e-logs and downhole data, and
4. Previous reports by DOGGR that demonstrate long-term ongoing compliance.

The idea here is that there may be enough data and previous detail already in DOGGR's possession to conclude that an existing field and injection well is *demonstrating that injected fluid will not migrate out of the approved zone or zones through another well, geologic structure, faults, fractures, or fissures, or holes in casing.*

Comment 5:

Section 1724.7 - Project Data Requirements (a)(2)(D) requires a representative electric log to a depth below the deepest producing zone.

a) Can previous electric log surveys be used?
b) If not, can an electric log survey be performed within the deepest well, rather than below the deepest producing zone? **(*)**

(*) – Can this be better clarified? We feel that it should be sufficient to allow an operator the ability to use existing data, regardless of age, as long as it has the quality necessary to make a reasonable conclusion. For existing wells and projects, we do not believe that it should not be a requirement to add deeper exploratory wells to gain additional data to make this determination, considering the cost would be too great.

1520 West Kettleman Lane • Suite A1 • Lodi, California 95242
209 368 9277 • 209 368 9276 (Fax) • www.lodistorage.com

Comment 6:

1724.7 (a)(8) – "Any data, in the judgement of the Supervisor, are pertinent and necessary for the proper evaluation of the underground injection control."

We would like to ask that in this there be protections for an operator. For example, if required to submit certain data types (i.e., proprietary seismic lines, etc.), this data will not be made public for all to use for their own exploration. We are in agreement that the Supervisor can have said data, but we are looking to verify how it will, and will not be used. This is mainly for our proprietary protection of such important technical data and resources.

1724.7 (c) – "All data…shall be submitted electronically…"

Here again, we would like to request that certain data should not be made public (such as electric data files for 3d seismic). Can protections be added to the language to address this issue?

We appreciate the opportunity to provide these comments. If you have any questions, or require more information, please contact me at gclark@lodistorage.com or at (209) 368-9277 x21.

Sincerely,

Gregory N. Clark
Compliance Manager

cc: File #S8.09
R. Habel (Rob.habel@conservation.ca.gov)
A. Anderson, S. Dupéré, E. Kuykendall, R. Russell (via e-mail)

1520 West Kettleman Lane • Suite A1 • Lodi, California 95242
209 368 9277 • 209 368 9276 (Fax) • www.lodistorage.com